

CLAIMS

1. A laser processing apparatus for processing a subject to be processed by irradiating the subject with laser light, the apparatus comprising:

- 5 a laser head for emitting laser light;
 a cooling jacket for holding and cooling the laser head;
 an optical system main part for adjusting the laser light emitted from the laser head to a predetermined characteristic; and
 a regulator, disposed between the cooling jacket and optical
10 system main part, for adjusting a position and inclination of the cooling jacket with respect to the optical system main part.

2. A laser processing apparatus according to claim 1, wherein the cooling jacket holds and cools a shutter unit for opening and closing an optical path of the laser light emitted from the laser head.

- 15 3. A laser processing apparatus according to claim 1, wherein the optical system main part comprises:

- a beam expander for adjusting a beam size of the laser light emitted from the laser head;
 a subject observation optical system for observing the subject;
20 and
 a processing objective lens for converging the laser light onto and within the subject.